



Official
Newsletter
of the
Fort Vancouver
Trades Guild

THE forge & plane

VOLUME V, NUMBER 4

FALL 2005

F&P Interview Kimm Fox-Middleton

THE FORGE & PLANE was fortunate to interview Kimm Fox-Middleton, Supervisory Park Ranger and Volunteer and Special Events Program Manager, late in September. She has now been at her post at Fort Vancouver for several months and is getting to know all of the Fort's various volunteers. She will be a familiar face to longstanding guild members, since she first came to Fort Vancouver in 1998. Kimm was first based at the Howard House, where she developed a long-range interpretative program. She has now happily relocated to an office above the Indian Trade Shop, where she will be implementing the Long Range Interpretive Plan she has developed for both the Fort and the Historic Reserve.

Kimm was happy to explain some of the organization of the Fort's volunteer program. All park divisions — administration, maintenance, interpretation, and curatorial resources/archeology — have volunteers. A supervisor of volunteers, a park staff member, is responsible for direct contact with volunteers in a particular area. At Fort Vancouver, Bill DeBerry, the volunteer supervisor for Historic Programs, oversees activities for all volunteers in the blacksmith shop, the carpenter shop, the bakehouse, the kitchen, and the garden.

Kimm supervises volunteers for special events here at the Fort. In that role she is responsible for contacting volunteers for spe-

cial events and making sure they have proper information about the event. For example, the reenactment frame for this year's Candlelight was 1846. In the past, the reenactment frame was the year 1845. Kimm feels it is beneficial to vary special events because many visitors return to the same events year after year. That makes it possible to build on what they have already learned by introducing additional historical perspectives and experiences.



Planning efforts are taking place to build on the existing cultural demonstrations (which are what the blacksmith shop offers on a daily basis) to include more activities in the carpenter shop, the bakeshop, and the

kitchen. The long-term goal is to offer a variety of interpretive programs during the week. Depending on the day, future visitors to the Fort may find cultural demonstrations, audio tours, self-guided tours, and guided tours of the archeology, fort, and village.

For Kimm, the biggest challenge facing the Fort is timely implementation of the Long Range Plan as visitation to the site increases

along with the visitors' desire for more interactive and exciting interpretation.

Guild members need not be reminded that the Fort is part of the Vancouver National Historic Reserve, a partnership with the City of Vancouver, the state of Washington, and the U.S. Army. Fort Vancouver spearheads interpretation for the Historic Reserve, responsible for telling many exciting stories of the site.♦



(Photo: David Plechl/The Columbian)

Painting by an Old Master?

HARRY NEWTON was quite astounded when he opened the *Columbian* one Saturday morning. He was heading directly to the sports section, to check on the track, when he came across this photo on the front page of the Clark County section. See, guys? Volunteering for the September Special Event Candlelight Tour can really pay off!♦

CALENDAR

CHRISTMAS AT THE FORT

December 10, 2005

10:00 - 4:00

Fort Vancouver National Historic Site
Blacksmiths' Shop

Experience the festive traditional sights, smells, and sounds of the holiday season.

Free admission

Location: Fort Vancouver

TRADE AXE WORKSHOP Guild-Sponsored Demonstration

Instructor: Wayne Goddard

January 21, 2006

Fort Vancouver Blacksmith Shop

For information: Ike Bay 503-645-2790

dasbayhaus@worldnet.att.net

Park Closed for Holidays

December 24-25, 2005

January 1, 2006

ABANA Happenings

2006 Conference

Seattle, Washington

July 5-8, 2006

For information: 706-310-0323

www.abanaseattle2006.com

Conference Poster Contest

Official 2006 Conference Poster Design

For information: Dave Mudge 985-736-0049

davemudge@abana.org

ABANA Disaster Relief Fund

Donate to help blacksmiths affected by Katrina and Rita

For information: Dave Mudge 985-736-0049

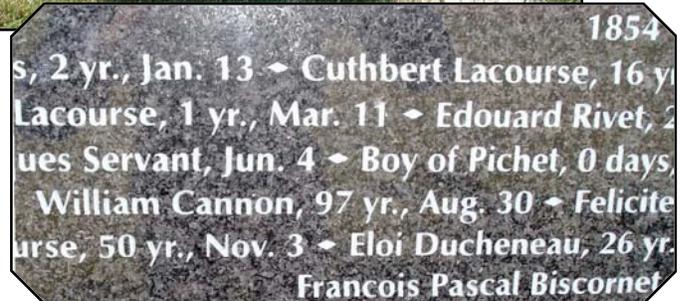
davemudge@abana.org

Fort Vancouver's First Blacksmith

WILLIAM CANNON, commonly regarded as the “first” blacksmith and millwright at Fort Vancouver, was born in 1755 in the territory near Pittsburgh. He was a Revolutionary War veteran who saw action at Kings Mountain, North Carolina, in 1780 and at Cowpens, South Carolina, in 1781. In 1810, Cannon, by then a soldier at one of the frontier outposts, Fort Mackinac, at the juncture of Lakes Michigan and Huron, joined an overland party being formed by Wilson Price Hunt to go to the mouth of the Columbia. Hunt was a partner of John Jacob Astor, and Cannon has a bit part in Washington Irving’s *Astoria*, although Irving makes no mention of his blacksmithing work. Cannon’s first assignment with the Pacific Fur Company was at the Willamette Post near present day Salem, Oregon. There he became one of the first Americans to live among retired Hudson Bay employees in French Prairie, near Champoege. William Cannon was married to Polly Clackamas. (It was customary at the time to create a surname for native Americans by using the name of their tribes.)

By 1824, at age 69, Cannon was working as a millwright and blacksmith for Dr. John McLoughlin at Fort Vancouver. He created the fort’s first grist mill by gouging a depression in a stump for a mortar and hanging a heavy wooden pestle from a “spring pole device.” He later carved the framework and gears for a larger mill and cut millstones from the local hillside and also helped build a sawmill powered by an overshot wheel.

Shortly after 1838, William Cannon was appointed Justice of the Peace. He voted in favor of Oregon’s becoming part of the American provisional government. Cannon died in 1854 and was buried by Bishop Francis Norbert Blanchet in the old cemetery



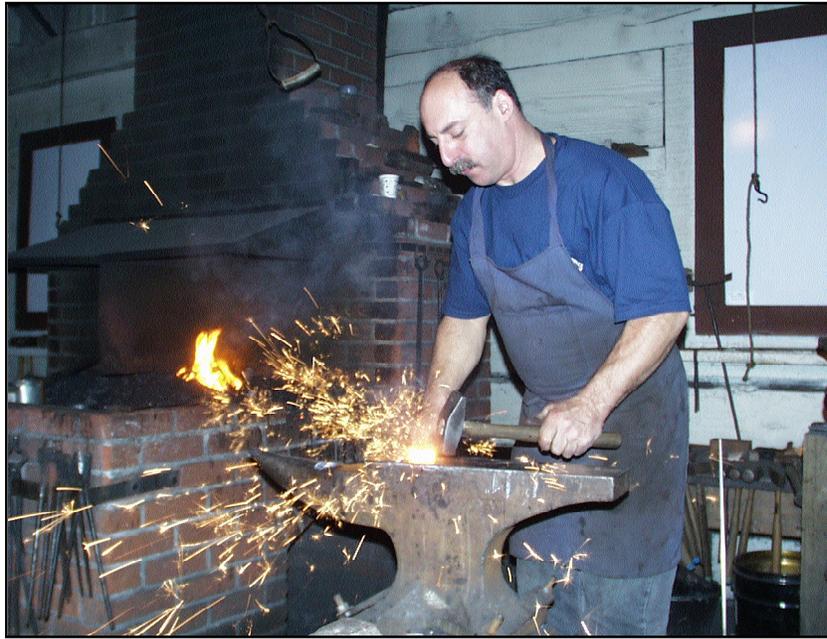
at St. Paul, Oregon. In 1991, based on research conducted by the Sons and Daughters of the Revolution, a gravestone was erected for Cannon in the cemetery at St. Paul. The stone recognizes that he is the only Revolutionary War soldier buried in Oregon. ♦

— Tom Laidlaw

Tom Laidlaw is a Fort Vancouver volunteer who interprets William Cannon and Peter Skene Ogden during special events at the Fort.

Photos: top, William Cannon's Tombstone, bottom, Inscription on St. Paul's Cemetery wall.

(S.Gawecki)



Peter Ross at the Fort Vancouver Blacksmith Shop 2002

A Rare Opportunity — Peter Ross Returns to Fort Vancouver!

AFTER AN ABSENCE of three years, Peter Ross, formerly master blacksmith at Colonial Williamsburg and internationally renowned for his museum-quality reproductions, will be returning to Fort Vancouver to demonstrate the art of reproducing period ironwork. This is a great opportunity to see and interact with a world-class blacksmith who specializes in historic reproduction. Ample time is always allowed for questions, and lively discussion often ensues. Peter and the fellow blacksmiths that he has trained have redefined the term “by hammer and hand.” He is a true master of the craft in every sense of the word and an outstanding teacher.

About the Fort Vancouver National Historic Site Blacksmiths Program

The volunteer blacksmiths at the Fort are supervised by Bill DeBerry, a fine smith in his own right. The volunteer blacksmiths interpret the roles of the Hudson’s Bay Company blacksmiths working in their shop circa 1840–1850. The blacksmiths provide both verbal

and hands-on interpretation for visitors to the Fort. The shop specializes in reproduction of historic artifacts from the Fort’s archeological collection for use in new construction as well as in the Fort’s living history demonstrations. The Fort Vancouver Trades Guild, presenters of this demonstration, is a group of volunteers who have banded together in the interest of promoting period blacksmithing.

Peter Ross Workshop

November 4-6, 2005

Fort Vancouver National Historic Site
Blacksmith Shop

Sponsored by Fort Vancouver Trades Guild

FEES

Guild Members: \$20/day

Nonmembers: \$20/day, plus \$10 initial signup fee

REGISTRATION

Dean Moxley *virus2@comcast.net, 503-284-6138*

David Stearns *dstearns@smt-net.com, 503-394-4324*

General Demonstration Schedule

Friday, November 4

- Large ladle/skimmer, spatulablades, skewer/rack set
- Nails and nail headers
- “D” door pull

Saturday, November 5

- Tongs and reproduction of Fort artifacts
- Large headed spike

Sunday, November 6

More artifacts and subjects not covered above

The Paul Hinds Mini-Metal Mover

Plans and Suggestions for Use

PAUL HINDS built this power hammer in about 1986, using only a cutting torch, a $\frac{3}{8}$ inch electric hand drill, and the electric welder he had built earlier. These drawings and observations were made when he demonstrated the hammer at the 1991 NWBA conference in St. Helen's, Oregon. Neither Paul, the designer-builder, nor myself, the writer-illustrator, is a professional engineer; nor have we had any formal training in design or operation of the tool, so we may have overlooked or neglected to explain dangers associated with undertaking this project. The builder, the author, and the NWBA hereby disclaim any liability for injury to persons or property that may result from building or using the Hinds Mini-Metal Mover. — Gary Hart

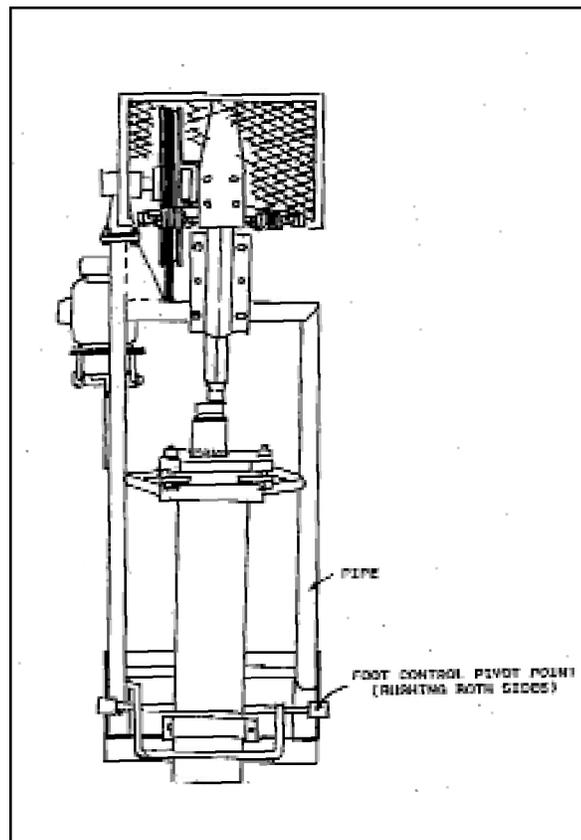
Commentary

No electrical wiring is shown in these drawings. All that is needed is proper grounding, proper power supply to your motor, and an on-off switch. Paul had his on-off switch located on the guard screen in front. Some other parts may have been left off for simplicity in showing the workings or by the author's ignorance: I've had no training in making drawings.

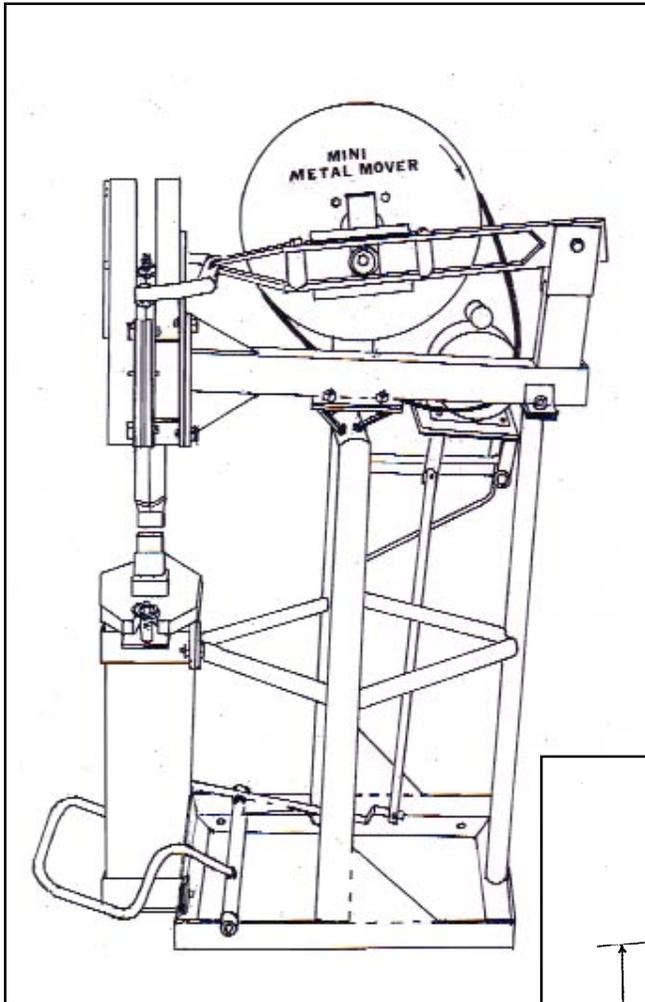
Stepping on the foot control tilts the motor rearward, causing the V-belt to tighten and start into motion the flat bottomed flywheel. There is an adjustable flat bar under the V-belt near the motor, visible in the left side view. When adjusted, this prevents the belt from falling and grabbing in the V-grooved pulley. This will give a smooth action to this simple clutch system.

The flywheel is fabricated from a 16" diameter circle of $\frac{1}{4}$ " plate. A $\frac{1}{2}$ x 1" flat bar rolled into a 15" diameter ring with the 1" surface making the belt surface. A ring cut from $\frac{1}{4}$ " plate with a 16" O.D. and a 14 $\frac{1}{2}$ " I.D. These are welded together to make the flywheel.

The flywheel must turn in the proper direction. That is, the crank (bearing inside the hammer arm) should be on the long axis, closest to the front, when lifting (power stroke) and on the short axis, closest to rear, when driving the hammer down. this will give a good snap to the hammer.



FRONT VIEW/G. Hart

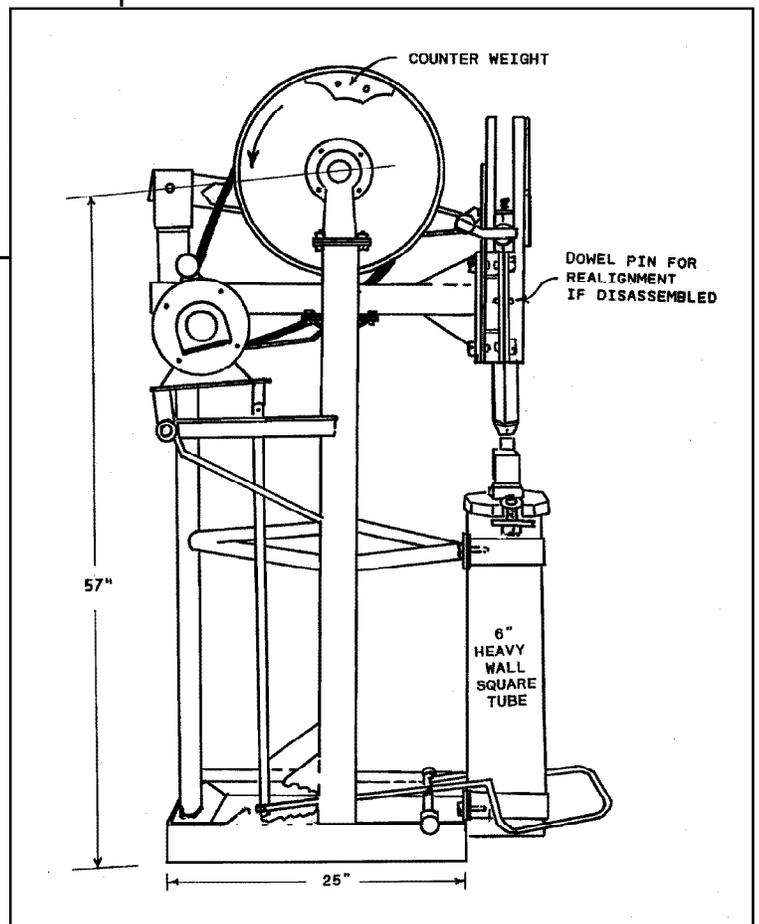


RIGHT SIDE/G. Hart

The center of the 2 3/4" bearing (crank) that drives the hammer arm is about 2 3/4" from the center of the flywheel. This bearing is mounted onto a U-shaped piece of flat bar about 1/2 x 2 1/2" with about 2" legs that are welded to the flywheel. The bearing bolt mounting hole has a slot about 1 1/2" long, to allow for some adjustment. Use a grade 8 or f9 11 bolt of 3/8" diameter or bigger for attaching this bearing.

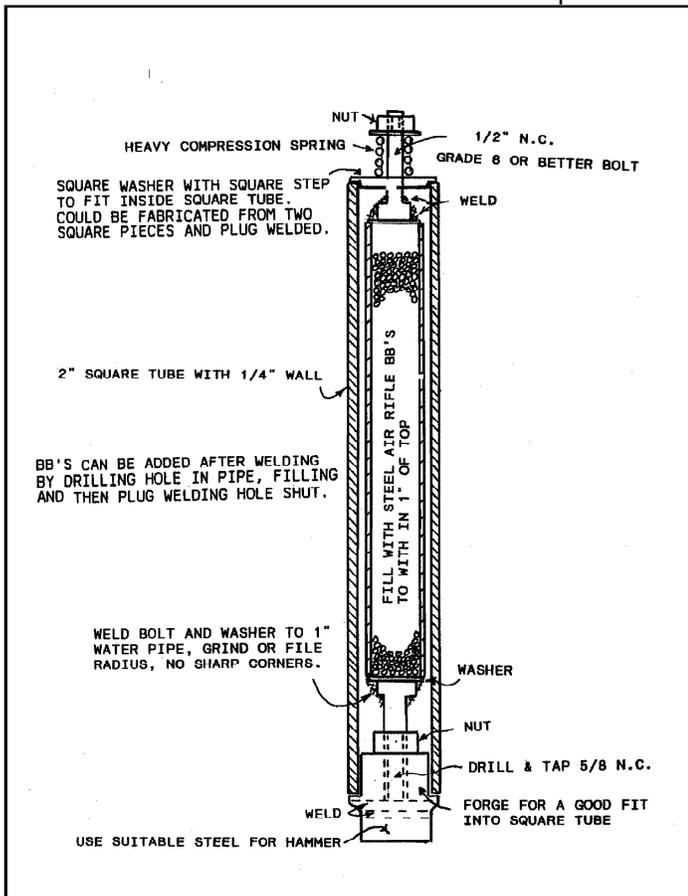
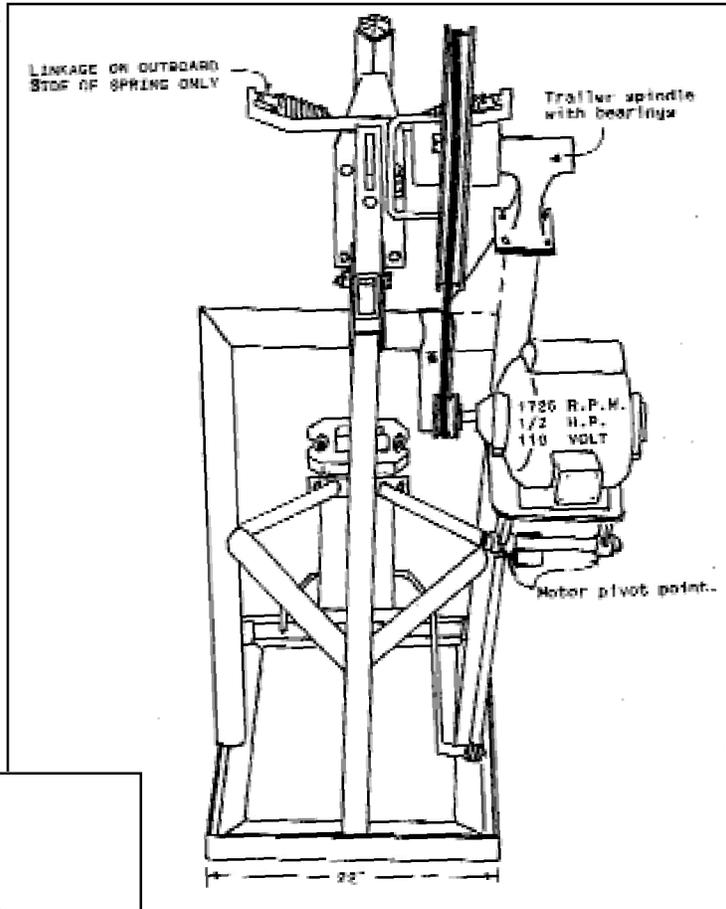
Paul Hinds said he designed the hammer arm to be light and still maintain enough strength. Excess weight in the hammer arm is not needed as it is the speed and hammer arm stroke length that delivers power to the hammer with a snap.

The length of the hammer arm from the pivot point to the center of the



LEFT SIDE/G. Hart

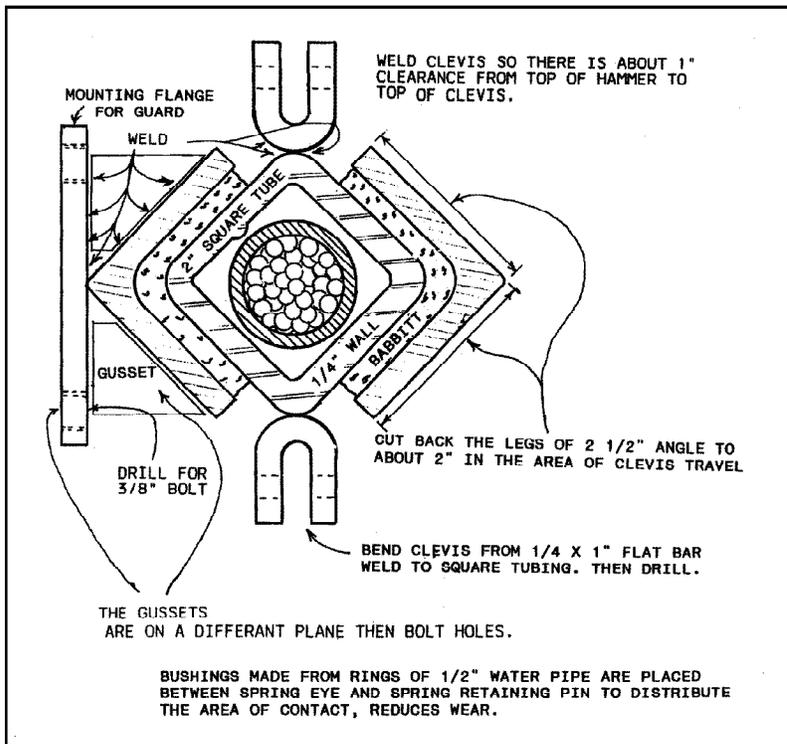
BACK VIEW/G. Hart



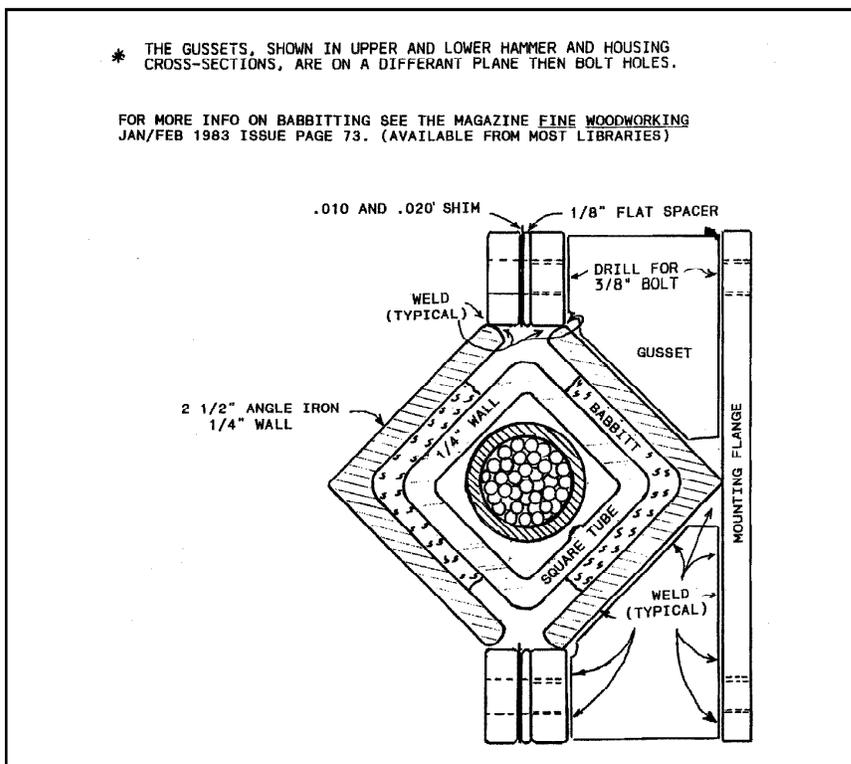
VERTICAL CROSS SECTION, HAMMER ASSEMBLY/G. Hart

hammer is 28". The distance inside of the arms where the springs attach is 17". The hammer arm is fabricated from $\frac{1}{4} \times 1 \frac{1}{2}$ " flat bar, on the long lengths, and $\frac{3}{8} \times 1$ " flat bar, on edge, is welded to the $1 \frac{1}{2}$ " flat bar in the area where the bearing pushes. Pipe is used with thru bolts to box the area in for further strength. The $1 \frac{1}{2}$ " flat bar is welded to the center of a 12" piece of heavy wall pipe. To the ends of this pipe are welded $\frac{3}{8} \times 1$ " flat bar. Two tabs are welded on the inside of these, from which the hammer springs are attached.

Be aware that the height of the anvil in relation to the hammer determines the travel of the hammer. You want about $\frac{1}{2}$ " or more clearance before the spring clevises meet the bottom of the groove in the hammer housing assembly. This will be necessary to remember if you build extra anvils. Determine the anvil height you want, distance from the ground to top of anvil, what is comfortable for you to use.



HORIZONTAL CROSS SECTION, UPPER PORTION OF HAMMER AND HOUSING/G. Hart



HORIZONTAL CROSS SECTION, LOWER PORTION OF HAMMER AND HOUSING/G. Hart

The operator is protected from the moving hammer arm by a guard. The guard has an angle iron framework that wraps around the sides about a foot. A mounting plate is welded to this framework for easy guard removal. The framework is covered with expanded metal.

Bearing for the sliding hammer is poured babbitt. First the inside surfaces of the angle iron should be cleaned thoroughly, a weld grinder would work well here.

Then this area where the babbitt will be is tinned with solder. The hammer is coated with a film of oil or grease. The hammer housing is assembled with shims and 1/8" spacer in place. The hammer is blocked in place and plugged so no babbitt will run out when poured. Babbitt has the advantage that no correction is needed for warpage in the angle iron from the welding. Brass or tenon strips fastened to the angle iron could be another option. ♦

News from the Forge

WITH FALL and the beginning of the “dark wet period,” I thought it would be appropriate to share with you some research material. Hopefully, keeping our brains active will prevent mold from developing during this dank time. Amazingly enough, there are folks in the NPS whose job it is to find interesting bits and books about historical stuff and then digitize it. They have amassed a huge electronic library and continue to add new titles every few months. All of this material is available on the web, FOR FREE! (Be aware that some of the stuff is protected under copyright law). One of the recent offerings is *The Ubiquitous Nail: An Annotated Bibliography* (1999) http://www.cr.nps.gov/history/online_books/nail/bibliography.pdf. Just type in the web address on your browser and you're there. For a full list of what's available from the NPS electronic history library, look in the alphabetical listings at <http://www.cr.nps.gov/history/index.asp>

Another resource for research is, of course, our park library. A list of new books that are now being catalogued and should be on the shelf in the next couple of months will appear in the next *Forge & Plane*.

Hope you have a great fall and winter and see you at the Fort! ♦ — Bill

Bill DeBerry, Park Ranger

Notes from the President

THE TIMES THEY ARE A-CHANGING . . . There are a lot of changes going on at the Fort and the guild is going to react positively to them. One big change is the use of recorders to guide many of the park visitors. This means that visitors to the blacksmith and carpenters shops will rely more on us to answer general questions relative to the Fort's history and operation. In the recent past, the quality of our interpretation has slipped and we need to correct that. It is hoped that Bill DeBerry will be able to spend

more time with the volunteers in the shops to insure we are saying the right things. We need to find more volunteers for the carpenter shop as well as refining the interpretation goals for that location. We are drafting suggestions for improving the shop, the “attic” in the Trade Store and the iron storage under the chief factor's house. Each guild member will have an opportunity for input before this is turned in to the Park Service.

By way of volunteer training we have replaced the individual volunteer notebooks some of you may have received many years ago with general-use volunteer notebooks. They are located in the cabinet by the coal bin. It is hoped that you will look at them during slow times in the shop.

Not only is there the basic volunteer notebook but we have created other notebooks with some background information on the blacksmiths shop, carpenter's shop, harness shop, and cooper's operation as well as information on the values and items traded at the Fort and information on trade axes and beaver traps. The script for the tapes the visitors will be hearing is also in a shop notebook. There is a notebook with the hand forging lessons put out by ABANA that will be updated as new lessons are published. We are now a recognized affiliate of ABANA (Artist-Blacksmiths Association of North America) and as such we have the authorization to republish their materials and those of other affiliate clubs. We will also be receiving newsletters from other clubs and sending them ours (digitally so no cost is involved). We will try to find a location near the sign in sheets to store these newsletters so they can be read easily by those who wish to. Over time, a fair-sized library will build up and it will need a home.

There are forms for Fort volunteers and membership applications for ABANA and NWBA in the forging lesson notebook in the shop. Feel free to hand them out to any visitor who may ask. Tell Bill when we run low so more can be made.

(continued on page 8)

Problems with recruiting volunteers for off-site events continue, and we are working on solutions. Part of the problem is effective communication with the membership. E-mails are quick and easy but do not reach a significant part of our group. Another factor is letting you know well in advance of these opportunities and exactly what they entail. Without the critical details it is not reasonable to expect you to commit your time and energy.

We have started a membership survey to help us understand the membership of the Guild. PLEASE FILL OUT AND RETURN YOUR FORM IF YOU HAVE NOT! Susan Gawecki has additional forms if yours has been misplaced. Please understand that your board is dedicated to making this organization a valuable resource for its members and for the Park Service. This is a group undertaking for all of us. Looking forward to hearing from you! ♦ — Ike

Ike Bay, Guild President

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Fossil Fuel\$!

THE PRICE of our coal has gone up significantly, from \$720 per ton to \$840 per ton. If you couple this increase with the price of gasoline for the round trip to Monroe to pick it up, there's a fair chunk of cash involved. Please use coal conservatively! ♦



THE
forge
plane

The Forge & Plane is the official newsletter of the Fort Vancouver Trades Guild. Please send your comments, submissions, and suggestions to

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